REMARKS

The Official Action dated March 9, 2011 has been carefully considered. Accordingly, it is believed that the present Amendment places this application in condition for allowance. Reconsideration is respectfully requested.

By the present Amendment, claim 1 is amended to include limitations from previous claims 12 and 13 and the specification, for example, at pages 6, lines 4-6. Claim 23 is amended to change its dependency from claim 13 to claim 1, and claims 12, 13 and 22 are cancelled. Claim 28 is added and contains limitations from previous claims 1 and 24 and the specification, for example, at page 4, lines 12-14 and 15-21. It is believed the present changes do not involve any introduction of new matter, whereby entry is in order and is respectfully requested.

In the Official Action, claims 1, 6, 9-14 and 16 were rejected under 35 U.S.C. §102(b) as being anticipated by the Tyagi et al WO 2002/33045. The Examiner relied on Figure 4 of Tyagi et al and asserted that element 75 as numbered in the Official Action is a double stranded DNA having a six nucleotide overhang with two hydrophobic moieties that are adjacent to each other and, since the hydrophobic moieties are each attached to a lipid membrane, they are "capable of such attachment" as claimed.

This rejection is traversed and reconsideration is respectfully requested. Specifically, as defined by claim 1, the present invention is directed to an oligonucleotide structure comprising a first strand of nucleic acid and a second strand of nucleic acid, the first and second strands being hybridized to each other in a duplex section, and at least two hydrophobic anchoring moieties capable of being attached to a lipid membrane. A terminal end of the first strand is not part of the duplex section and is free from a hydrophobic moiety, and the hydrophobic anchoring

moieties are covalently attached to adjacent terminal ends of the first and second strands, respectively. The oligonucleotide structure is immobilized to a surface by binding to a surface-immobilized linker or by binding to a lipid membrane-attached linker.

Tyagi et al discloses oligonucleotide-facilitated coalescence wherein cells, liposomes and lipid particles are provided with respective oligonucleotides. The oligonucleotides are complementary and hybridize to bring the cells, liposomes and/or lipid particles together as an aid to efficient fusion, which may be further aided by asthmatic or electrical shock. However, Applicants find no teaching in Tyagi et al that the hybridized oligonucleotides are, in addition, immobilized to a surface by binding to a surface-immobilized linker or by binding to a lipid membrane-attached linker as recited in claim 1. To the contrary, the function of the element 75 in Figure 4 of Tyagi et al is the hybridization to assist the coalescence, which is shown as completed in Figure 4.

As defined by claim 28, the oligonucleotide structure comprises a first strand of nucleic acid and a second strand of nucleic acid, the first and second strands being hybridized to each other in a duplex section, and at least two hydrophobic anchoring moieties covalently attached to adjacent terminal ends of the first and second strands, respectively, and capable of attaching at adjacent sites on a lipid membrane. A terminal end of the first strand is not part of the duplex section and is free from a hydrophobic moiety, and the oligonucleotide structure is a linker available for binding to the lipid membrane. As set forth at page 4, lines 12-14 of the specification, "linker available for binding" means that the linker is capable of binding but not yet bound. Thus, the oligonucleotide of claim 28 is capable of binding to the lipid membrane but is not yet bound to the lipid membrane.

Contrary to the oligonucleotide structure of claim 28, which is a linker available for binding a lipid membrane, comprising both a duplex section and at least two hydrophobic anchoring moieties capable of being attached to a lipid membrane, the element 75 in Figure 4 of Tyagi et al is a double stranded DNA with two hydrophobic moieties that are each already attached to a lipid membrane. Applicants find no teaching by Tyagi et al that the element 75 is available for binding another lipid membrane. i.e., capable of binding, but not yet bound, to a lipid membrane.

Anticipation under 35 U.S.C. §102 requires that each and every element as set forth in the claims is found, either expressly or inherently described, in a single prior art reference. *In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999). In view of the failure of Tyagi et al to teach an oligonucleotide structure as recited in claim 1, immobilized to a surface by binding to a surface-immobilized linker or by binding to a lipid membrane-attached linker, Tyagi et al do not disclose, expressly or inherently, each and every element as set forth in claim 1. Further, in view of the failure of Tyagi et al to teach an oligonucleotide structure as recited in claim 28, which is a linker available for binding a lipid membrane but not yet bound to the lipid membrane and comprising both a duplex section and at least two hydrophobic anchoring moieties capable of being attached to a lipid membrane, Tyagi et al do not disclose, expressly or inherently, each and every element as set forth in claim 28. Accordingly, Tyagi et al fail to anticipate the oligonucleotide structures of claims 1, 6, 9-11, 14 and 16, or the oligonucleotide structure of claim 28, and the rejection under 35 U.S.C. §102 has been overcome. Reconsideration is respectfully requested.

It is believed that the above represents a complete response to the Official Action and places this application in condition for allowance. In the event that there are any outstanding issues, the Examiner is encouraged to telephone the undersigned in order to expedite their resolution. Please charge any fee required with this response to Deposit Account No. 503915.

Respectfully submitted,

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